Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently amended)   A method for establishing a communication link from a first processing unit located in a first network to a second processing unit located in a second network, through a wireless network comprising a plurality of nodes, said method comprising:

     generating a plurality of dynamic routes using each of said plurality of nodes;

     in a first gateway, selecting one of a~the plurality of dynamic routes between the nodes to access a second gateway, the first gateway adapted for accessing the wireless network and said first processing unit, the second gateway adapted for accessing the wireless network and said second processing unit; and

     establishing a tunnel between the first gateway and the second gateway using the selected route to thereby establish said communication link; wherein said generating comprises, for a given node, detecting a neighboring node to said given node, collecting data identifying said detected neighboring node and transmitting to the first gateway said data identifying said detected neighboring node with data identifying said given node to generate said plurality of dynamic routes.

Claim 2 (Canceled)

Claim 3 (Currently amended)   The method as claimed in claim 21, wherein said generating is performed in response to a broadcast performed by said first gateway.

Claim 4 <u>(Currently amended)</u>   The method as claimed in claim 2<u>1</u>, wherein said generating of said plurality of dynamic routes is performed randomly in time.

Claim 5 <u>(Canceled)</u>

Claim 6 <u>(Currently amended)</u>   The method as claimed in claim 5<u>1</u>, further comprising performing a broadcast from said first gateway, wherein said generating is performed in response to said broadcast.

Claim 7 <u>(Currently amended)</u>   The method as claimed in claim 5<u>1</u>, wherein said generating of said plurality of dynamic routes is performed randomly in time.

Claim 8 <u>(Currently amended)</u>   The method as claimed in claim 5<u>1</u>, wherein said generating comprises detecting a first set of neighboring nodes to said given node and detecting a second set of neighboring nodes to each neighboring node of said first set of neighboring nodes.

Claim 9 <u>(Currently amended)</u>   The method as claimed in claim 5<u>1</u>, further comprising selecting at least one part of said transmitted data identifying said detected neighboring node using said data identifying said given node according to a criteria.

Claim 10 <u>(Original)</u> The method as claimed in claim 9, wherein said criteria comprises at least one of bandwidth, reliability of each of said node and cost of using each of said node.

Claim 11 <u>(Original)</u> The method as claimed in claim 1, wherein said selecting of one of the routes in the first gateway is performed according to a criteria.

Claim 12 <u>(Original)</u> The method as claimed in claim 11, wherein said criteria comprises at least one of bandwidth, reliability of each of said node and cost of using each of said node.

Claim 13 (Original) The method as claimed in claim 1, wherein said establishing a tunnel comprises establishing an encrypted tunnel.

Claim 14 (Original) The method as claimed in claim 1, wherein said first network comprises one of a wide area network (WAN) and a local area network (LAN).

Claim 15 (Original) The method as claimed in claim 14, wherein said first network comprises the Internet.

Claim 16 (Currently amended)   An apparatus for transmitting data between a first processing unit located on a first network and a wireless network processing unit located on a wireless network comprising a plurality of wireless network processing units, said apparatus comprising:

a memory for storing a plurality of dynamically established routes between each wireless network processing unit of said plurality of wireless network processing units;

a wireless module adapted to transmit a wireless signal to a given wireless network processing unit of the wireless network in accordance with one of said plurality of routes;

a network adapter adapted to receive a first processing unit signal from said first processing unit; and

a processor connected to said memory, to said wireless module and to said network adapter, said processor adapted to encapsulate said first processing unit signal into said wireless signal to provide at least one part of said first processing unit signal to said second processing unit according to one of said routes; wherein said plurality of dynamically established routes between each wireless network processing unit have been generated using a generating process comprising, for a given node, detecting a neighboring node to said given node, collecting data identifying said detected neighboring node and receiving said data identifying said detected neighboring node with data identifying said given node to generate said plurality of dynamic routes.

Claim 17 (Original) The apparatus as claimed in claim 16, wherein said wireless module comprises a point to point wireless communication module.

Claim 18 (Original) The apparatus as claimed in claim 16, wherein said processor is further adapted to encrypt said first processing unit signal to provide an encrypted first processing unit signal which is further encapsulated into said wireless signal to provide said first processing unit signal to said second processing unit.

Claim 19 (Original) The apparatus as claimed in claim 16, wherein said memory comprises a volatile memory comprising said plurality of dynamically established routes between each wireless network processing unit of said plurality of wireless network processing units.

Claim 20 (Original) The apparatus as claimed in claim 16, wherein said network adapter comprises an Ethernet compatible network adapter.

Claims 21-24 (Canceled)